IN THE CLAIMS

Please cancel claims 13 and 19-30, and add new claims __-__.

1. - 30. (Cancelled)

31. (New) A method for coating glass for use in a solid state standard, said method comprising the steps of:

applying a layer of a first fluorescent material;

applying a layer of a second fluorescent material, said second fluorescent material being different from said first fluorescent material;; and

applying a layer of a third fluorescent material;

wherein each said layer is baked between each said application.

32. (New) A method according to claim 31, wherein said method is used to coat optical glass.

33. (New) A method according to claim 31, wherein said method is used to coat optical quartz.

34. (New) A method according to claim 31, wherein said layer is selected from a group consisting of BaF_2, CaF_2, CsI, KBr, Kcl, KRS-5, NaCl, HFO_2, MgO, Fluroisothiocyanate (FITC), Fluorescene, Rhodamine B, Quinine Sulfate, Bodipy and Green Fluorescent Protein.

35. (New) A method according to claim 31, wherein said first fluorescent material is substantially similar to said third fluorescent material.

36. (New) A method according to claim 31, wherein said fluorescent material has a known absorption wavelength.

37. (New) A method according to claim 31, wherein said baking takes place at approximately at 250 degrees Centigrade.

38. (New) A method for coating glass for use in a solid state standard, said method comprising the steps of:

applying a layer of a first absorbent material;

applying a layer of a second absorbent material, said second absorbent material being different from said first absorbent material;; and

applying a layer of a third absorbent material;

wherein each said layer is baked between each said application.

39. (New) A method according to claim 38, wherein said method is used to coat optical glass.

40. (New) A method according to claim 38, wherein said method is used to coat optical quartz.

41. (New) A method according to claim 38, wherein said layer is selected from a group consisting of AgBr, AgCl, Al_2O_3, CdTe, Ge, Si, SiO_2, TiO_2, ZnS, and ZnSe.

42. (New) A method according to claim 38, wherein said first absorbent material is substantially similar to said third absorbent material.

43. (New) A method according to claim 38, wherein said absorbent material has a known absorption wavelength.

44. (New) A method according to claim 38, wherein said baking takes place at approximately at 250 degrees Centigrade.

45. (New) A method for coating glass for use in a solid state standard, said method comprising the steps of:

applying a primary layer of TiO_2;

applying one or more layers of SiO_2; and

applying a final layer of TiO_2;

wherein each layer is baked between said applications.

46. (New) A method according to claim 45, wherein said method is used to coat optical glass.

46. (New) A method according to claim 45, wherein said method is used to coat optical quartz.

47. (New) A method according to claim 45, wherein said baking takes place at approximately at 250 degrees Centigrade.